

Serial Number: 09/897,772☐

Changed a file from non-ASCII to ASCII

ENTERED☐

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐

Edited a format error in the Current Application Data section, specifically:

☐Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____☐

Added the mandatory heading and subheadings for "Current Application Data".

☐

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐

Inserted colons after headings/subheadings. Headings edited included:

☐

Deleted extra, invalid, headings used by an applicant, specifically:

☒Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____☐

Inserted mandatory headings, specifically:

☐

Corrected an obvious error in the response, specifically:

☐

Edited identifiers where upper case is used but lower case is required, or vice versa.

☐

Corrected an error in the Number of Sequences field, specifically:

☐

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐

Other: _____

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

OIPE

RAW SEQUENCE LISTING

DATE: 12/20/2001

PATENT APPLICATION: US/09/897,772

TIME: 09:32:57

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\I897772.raw

```

4 <110> APPLICANT: Allen, Keith D.
6 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING BMP GENE
7   DISRUPTIONS
9 <130> FILE REFERENCE: R-268
11 <140> CURRENT APPLICATION NUMBER: US 09/897,772
12 <141> CURRENT FILING DATE: 2001-06-29
14 <150> PRIOR APPLICATION NUMBER: US 60/215,178
15 <151> PRIOR FILING DATE: 2000-06-29
17 <160> NUMBER OF SEQ ID NOS: 4
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 1879
23 <212> TYPE: DNA
24 <213> ORGANISM: Mus musculus
26 <400> SEQUENCE: 1
27 ccacgcgtcc gcgcgggagc tgcttgagg ctcggcggcc gggaggaggc cggggccacg 60
28 cttcttgga gctactgagt gacttctttg aagaaccatg aagtcacact atattgtgct 120
29 agctctagcc tccctgacgt tccctgctgtg tctccccgtg tcccagagct gtaacaaagc 180
30 actctgtgcc agcgatgtga gcaaatgcct cattcaggag ctctgccagt gccggcctgg 240
31 agaagggaac tgccccctgt gtaaggagt catgctgtgc ctcggggccc tgtgggacga 300
32 gtgctgcgac tgtgtcggta tgtgcaaccc tcggaattac agcgacaccc cggccacatc 360
33 caagagcacc gtggaggagc tgcacgagcc cattccgtcc ctgttcaggg cgtgacgga 420
34 gggcgacacc cagctgaact ggaacatcgt ctccttccct gtggcagagg agctgtcaca 480
35 ccatgaaaac ctagtctcct tcctagaaaac tgtgaaccag ctgcaccacc aaaacgtgtc 540
36 tgttcccagc aacaatgtcc acgccccctt cccagcgac aaagagcgca tgtgcacagt 600
37 ggtttacttt gatgactgca tgtccatcca ccagtgtgaa atatcctgcg aatccatggg 660
38 tgcattccaag tatcgctggt ttcacaacgc ctgctgcgag tgcattcggtc cagagtgcac 720
39 tgactatggg agtaaaactg tcaagtgtat gaactgcatg ttttaaagag ggggaagaaa 780
40 tgcaaaccaa agcaagaacg ctgacgatgc cgttgacact cctaccttgc aggatgtccc 840
41 cacagagtcc actggaccag cttgtacaag ggtgaaacct ttctgcgtca cctttctgct 900
42 tttgcagagc catgacagca gctgccttac agcgtgattt agcagacaga cctgacaggt 960
43 gtgtcatgtg acaggcagcc atcagggtgg cctagcacat ttgtgggtgc tgatgttgta 1020
44 ttgactgtgc aaagactgac cagtccctgat agggctggaa agaggaaaagg ggtgtgggaa 1080
45 ggtgactttc ttagctctcc cgtagcagca cactgtcata gtgtctcagt gtcataattgc 1140
46 tgtgaagaga caccacaacc aaggcagctt atgaagaaag cccttaatta gggctcgttt 1200
47 tacagttccg aggttacttc ctggtcgtcg tgggtgggat gaggcagtag gtagcaggca 1260
48 tgggtctgga gcagtagctg aatgttggtt cacaaactta gcacctcgag tcatgataga 1320
49 aacaccatcc aggccttgaa gcccaacacg tagcaacacc acttgccaaa gcaggatcaa 1380
50 ggctctgtca gcgtcccagg atgcagttgg gcaagttctt gagtgaattt cctatacata 1440
51 ctaactctgc aattttgctt ctatagttcc tcttcttgtt aactatatgt ccagaacccat 1500
52 ttcagaatat ggggttttgt gaataaaaaa aataaaaagg cctggtctgc atagattggg 1560
53 caagttccct tgcagccaca ggctaacagt aaagacttcc tatttggttt taggagtatc 1620
54 caaggggtgg tctctcgtga gattacctcg caacagcagc agatggtgtt ggaggccttg 1680
55 cctgctgtgg gcttttgaaa ccttaaagtc caccctcagt gacacgcctc ctccaataac 1740
56 accacacctc ctaatccttt ctaagtatgc cctcaactgg gaaccaagca ttcagatata 1800
57 cgagcccaca aaggccattc tcgttcaaac caccacatgt aataaaaatat atgccacgtc 1860
58 aaaaaaaaaa aaaaaaaaaa

```

RAW SEQUENCE LISTING

DATE: 12/20/2001

PATENT APPLICATION: US/09/897,772

TIME: 09:32:57

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\I897772.raw

```

60 <210> SEQ ID NO: 2
61 <211> LENGTH: 222
62 <212> TYPE: PRT
63 <213> ORGANISM: Mus musculus
65 <400> SEQUENCE: 2
66 Met Lys Ser His Tyr Ile Val Leu Ala Leu Ala Ser Leu Thr Phe Leu
67 1 5 10 15
68 Leu Cys Leu Pro Val Ser Gln Ser Cys Asn Lys Ala Leu Cys Ala Ser
69 20 25 30
70 Asp Val Ser Lys Cys Leu Ile Gln Glu Leu Cys Gln Cys Arg Pro Gly
71 35 40 45
72 Glu Gly Asn Cys Pro Cys Cys Lys Glu Cys Met Leu Cys Leu Gly Ala
73 50 55 60
74 Leu Trp Asp Glu Cys Cys Asp Cys Val Gly Met Cys Asn Pro Arg Asn
75 65 70 75 80
76 Tyr Ser Asp Thr Pro Pro Thr Ser Lys Ser Thr Val Glu Glu Leu His
77 85 90 95
78 Glu Pro Ile Pro Ser Leu Phe Arg Ala Leu Thr Glu Gly Asp Thr Gln
79 100 105 110
80 Leu Asn Trp Asn Ile Val Ser Phe Pro Val Ala Glu Glu Leu Ser His
81 115 120 125
82 His Glu Asn Leu Val Ser Phe Leu Glu Thr Val Asn Gln Leu His His
83 130 135 140
84 Gln Asn Val Ser Val Pro Ser Asn Asn Val His Ala Pro Phe Pro Ser
85 145 150 155 160
86 Asp Lys Glu Arg Met Cys Thr Val Val Tyr Phe Asp Asp Cys Met Ser
87 165 170 175
88 Ile His Gln Cys Lys Ile Ser Cys Glu Ser Met Gly Ala Ser Lys Tyr
89 180 185 190
90 Arg Trp Phe His Asn Ala Cys Cys Glu Cys Ile Gly Pro Glu Cys Ile
91 195 200 205
92 Asp Tyr Gly Ser Lys Thr Val Lys Cys Met Asn Cys Met Phe
93 210 215 220
96 <210> SEQ ID NO: 3
97 <211> LENGTH: 200
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Targeting Vector
104 <400> SEQUENCE: 3
105 aacaaatgaa gatcttttgt ccctcgtttt tgtcctgtgc tgatgagcag taagagggct 60
106 agaaagtaac tgcaggtatt ctctgagcaa gcgagcgagt ggccgagctc ttctgcctg 120
107 tactgaaatg tccctttgca tttcagagcg catgtgcaca gtggtttact ttgatgactg 180
108 catgtccatc caccagtga 200
110 <210> SEQ ID NO: 4
111 <211> LENGTH: 200
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:

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RAW SEQUENCE LISTING

DATE: 12/20/2001

PATENT APPLICATION: US/09/897,772

TIME: 09:32:57

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\I897772.raw

116 <223> OTHER INFORMATION: Targeting Vector

118 <400> SEQUENCE: 4

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119 gtccagagtg cattgactat gggagtaaaa ctgtcaagtg tatgaactgc atgtttttaa 60
120 gagggggaag aaatgcaaac caaagcagta agtcatgaag tgtgcagaaa tcttggttct 120
121 ggtatgctag gagtgtgtta agttatatga ttgtaactgt gctttttata tctggtgcct 180
122 attagtgtag gtcttttcca                                200
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VERIFICATION SUMMARY

DATE: 12/20/2001

PATENT APPLICATION: US/09/897,772

TIME: 09:32:58

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\12202001\I897772.raw

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/897,772

DATE: 12/13/2001

TIME: 13:50:05

Input Set A:\R-268.txt

Output Set: N:\CRF3\12132001\I897772.raw

4 <110> APPLICANT: Allen, Keith D.
 6 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING BMP GENE
 7 DISRUPTIONS
 9 <130> FILE REFERENCE: R-268
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 15 <151> PRIOR FILING DATE 2000-06-29
 17 <160> NUMBER OF SEQ ID NOS: 4
 19 <170> SOFTWARE: FastSEQ for Windows Version 4.0

ERRORED SEQUENCES

110 <210> SEQ ID NO: 4
 111 <211> LENGTH: 200
 112 <212> TYPE: DNA
 113 <213> ORGANISM: Artificial Sequence
 115 <220> FEATURE:
 116 <223> OTHER INFORMATION: Targeting Vector
 118 <400> SEQUENCE: 4
 119 gtccagagtg cattgactat gggagtaaaa ctgtcaagtg tatgaactgc atgttttaaa 60
 120 gagggggaag aaatgcaaac caaagcagta agtcatgaag tgtgcagaaa tcttggttct 120
 121 ggtatgctag gagtgtgtta agttatatga ttgtaactgt gctttttata tctggtgcct 180
 122 attagtgtag gtcttttcca 200

E--> 126 (1)

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/897,772

DATE: 12/13/2001

TIME: 13:50:06

Input Set : A:\R-268.txt

Output Set: N:\CRF3\12132001\I897772.raw

L:126 M:254 E: No. of Bases conflict, LENGTH:Input:1 Counted:200 SEQ:4